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1	APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
١	09/918,293	07/30/2001	Elisabeth Smela	S-80,400	400 9877		

590 06/26/2002

Samuel M. Freund 11 Timber Ridge Road Los Alamos, NM 87544 EXAMINER

DOUGHERTY, THOMAS M

ART UNIT PAPER NUMBER

2834

DATE MAILED: 06/26/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)					
	09/918,293	SMELA ET AL.					
Office Action Summary	Examiner	Art Unit					
	Thomas M. Dougherty	2834	Ne				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the	correspondence ad	dress				
THE MAILING DATE OF THIS COMMUNICATION. Extensions of time may be evaluable under the provisions of 3°CFR.1.1 after SIX (8) MONTHS from the making date of this communication. If the parties of or regly sepscified above is less than thirty (30°) days, a reply If NO parted for regly is specified above, the maximum standary parted when the provision of the pro	A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. Extraction of time may be resimilated usual for large various of 37 CFR 1.136(a). In no event, however, may a reply be timely filed sets (S) (5) MONTHS from the mailing date of this communication. If the period for reply sepecified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. Failure to reply within the set or excluded period for reply will, be statute, cause the application to become ABMOONED (SIX C). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned planter than distribution.						
1) Responsive to communication(s) filed on 30 J	uly 2001 .						
2a) ☐ This action is FINAL . 2b) ☑ Thi	s action is non-final.						
3) Since this application is in condition for allowance except for formal matters, prosecution as to the meri closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims							
4) Claim(s) 1-4 is/are pending in the application.							
4a) Of the above claim(s) is/are withdrawn from consideration.							
5) Claim(s) is/are allowed.							
6)⊠ Claim(s) <u>1-4</u> is/are rejected.							
7) Claim(s) is/are objected to.		•					
8) Claim(s) are subject to restriction and/or election requirement.							
Application Papers							
9) The specification is objected to by the Examiner.							
10) ☑ The drawing(s) filed on <u>07/30/02</u> is/are: a) ☑ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
						11)☐ The proposed drawing correction filed on is: a)☐ approved b)☐ disapproved by the Examiner.	
If approved, corrected drawings are required in reply to this Office action.							
12) The oath or declaration is objected to by the Exa	aminer.						
Priority under 35 U.S.C. §§ 119 and 120							
13)⊠ Acknowledgment is made of a claim for foreign	priority under 35 U.S.C. § 119(a	i)-(d) or (f).					
a)☐ All b)☐ Some * c)☐ None of:							
 Certified copies of the priority documents 	have been received.						
Certified copies of the priority documents	have been received in Applicat	on No					
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.							
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application							
a) ☐ The translation of the foreign language provisional application has been received. 15)☑ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.							
Attachment(s)							
Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of Informal	/ (PTO-413) Paper No(Patent Application (PT					

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DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claims 1-4 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Madden et al. (US 6,249,076). Madden shows (fig. 4) an actuator consisting of a conjugated polymeric material (col. 1, II. 15-18), whereby said material expands when an electrical voltage is applied between two locations thereof (18, 36) and contracts when the electrical voltage is reduced. Said conjugated polymeric material comprises polyaniline (col. 3, II. 52-53). A method of actuation comprising the step of directly electrically stimulating a conjugated polymeric material (12) at two locations (18,36) thereof. As noted said conjugated polymeric material (12) comprises polyaniline.

Claims 1-4 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Kaneto et al. (US 5,556,700). Kaneto shows (fig. 2b) an actuator consisting of a conjugated polymeric material (12 or 14 or both), whereby said material expands when an electrical voltage is applied between two locations thereof (22, 24) and contracts when the electrical voltage is reduced. Said conjugated polymeric material comprises polyaniline (see ABSTRACT). A method of actuation comprising the step of directly

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electrically stimulating a conjugated polymeric material (12 and/or 14) at two locations (22, 24) thereof. As noted said conjugated polymeric material (12 and/or 14) comprises polyaniline.

Direct inquiry concerning this action to Examiner Dougherty at (703) 308-1628.

fm⊊ tmd

June 24, 2002

Glomas M.

HOMAS M. DOUGHERTY PRIMARY EXAMINER GROUP 2400

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